

What is a Landfill?

- ✦ RCRA defines disposal as:
 - “deposit of hazardous wastes into or on land or water in such a way that hazardous wastes or constituents from the waste may be emitted to air, surface water or groundwater”
- ✦ Under this definition, a **landfill** is a disposal option; recognized as an **alternative** to directly disposing of waste to the environment

Treatment or Storage?

- ✦ RCRA defines treatment as:
 - “physical, chemical or biological processes intended to detoxify or neutralize hazardous wastes, to reduce their volume or to make hazardous waste amenable for recovery, storage or transport”
- ✦ RCRA defines storage as:
 - “containment of hazardous waste so as not to constitute disposal”

LANDFILLS

Decision Making

- ✦ Considerations for Containment/Closure
- ✦ Consolidation/Cell Management
- ✦ New Approaches
- ✦ Reuse and Redevelopment

LANDFILLS - DECISION MAKING

Capping

✦ Effectiveness

- Location
- Future Land Use
- Contaminants Contained in the Landfill
- Long-term Monitoring Considerations

✦ Selecting a Material

✦ Costs

LANDFILLS - DECISION MAKING

Consolidation

Consolidating landfill materials into one unit has some benefits and some risks:

✦ The benefits include:

- A single manageable unit
- Consolidation of monitoring
- Creates clear areas for property transfer

✦ The risks include:

- Co-mingling waste that are not compatible
- Co-mingling liabilities

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Consolidation (cont.)

- ✦ Compatibility of waste
- ✦ Monitoring requirements
- ✦ Remediation

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New Approaches

- ✦ Environmental Isolation/Co-existence
- ✦ Wetland/Habitat Construction

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Reuse and Redevelopment

- ✦ *The Ultimate Brownfield -*
- ✦ Redevelopment Benefits
- ✦ Redevelopment Hurdles
- ✦ Risk and Liability Exposure

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5-Year Review - Lessons Learned

- ✦ Evaluation of LTM results
- ✦ Regulatory Changes
- ✦ Land Use Changes
- ✦ Evaluation of Options

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Long Term Monitoring (LTM)

- ✦ Environmental Setting
- ✦ Long Term Material Stability
- ✦ Minimization and Costs
- ✦ Liability

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Limiting Cost/Cost Effectiveness

- ✦ Cost benefit analysis
- ✦ Natural solutions
- ✦ Public Concern